

No. 724,205.

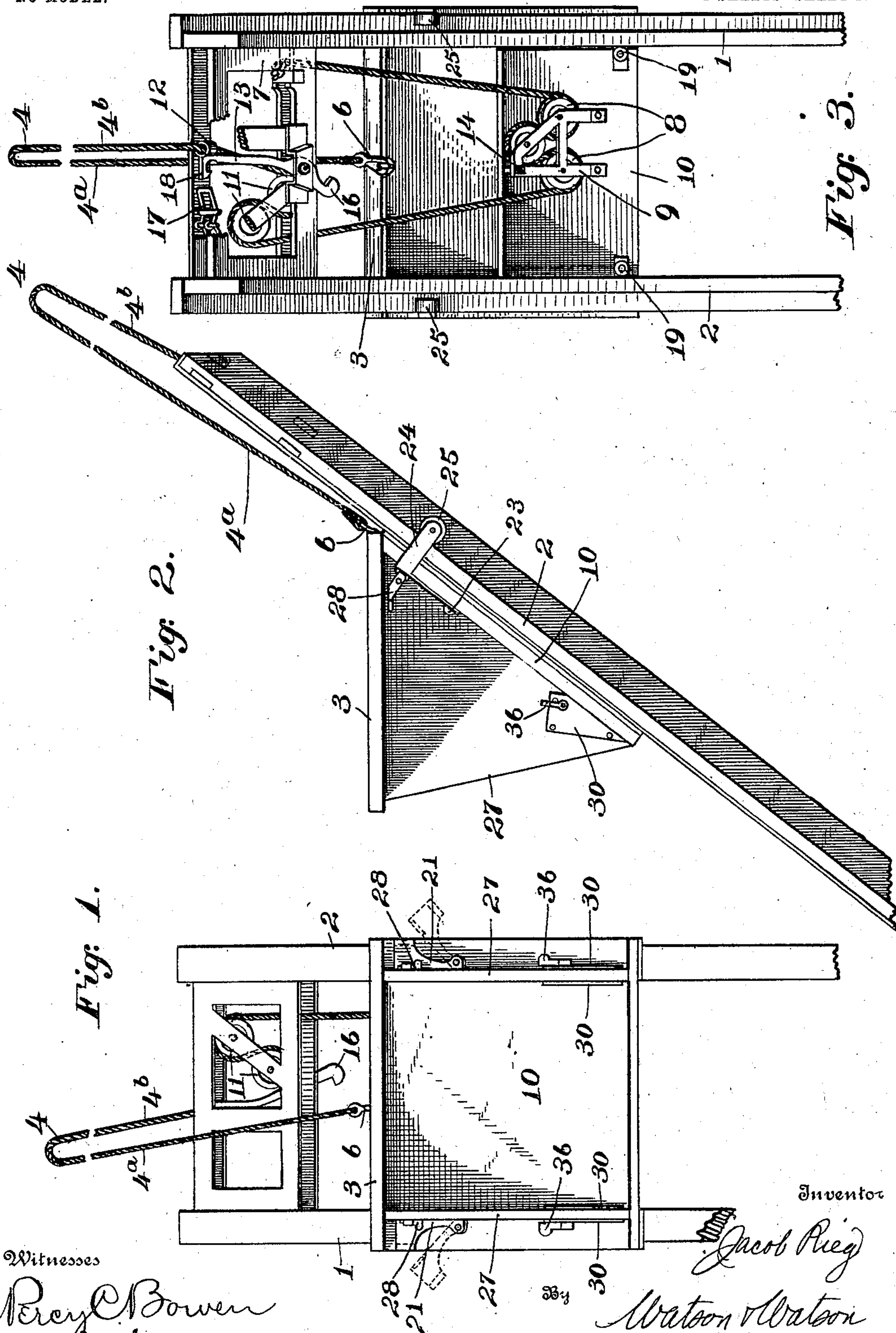
PATENTED MAR. 31, 1903.

J. RIEG.
SIDEWALK ELEVATOR.

APPLICATION FILED AUG. 26, 1902.

NO MODEL.

2 SHEETS—SHEET 1.



Witnesses

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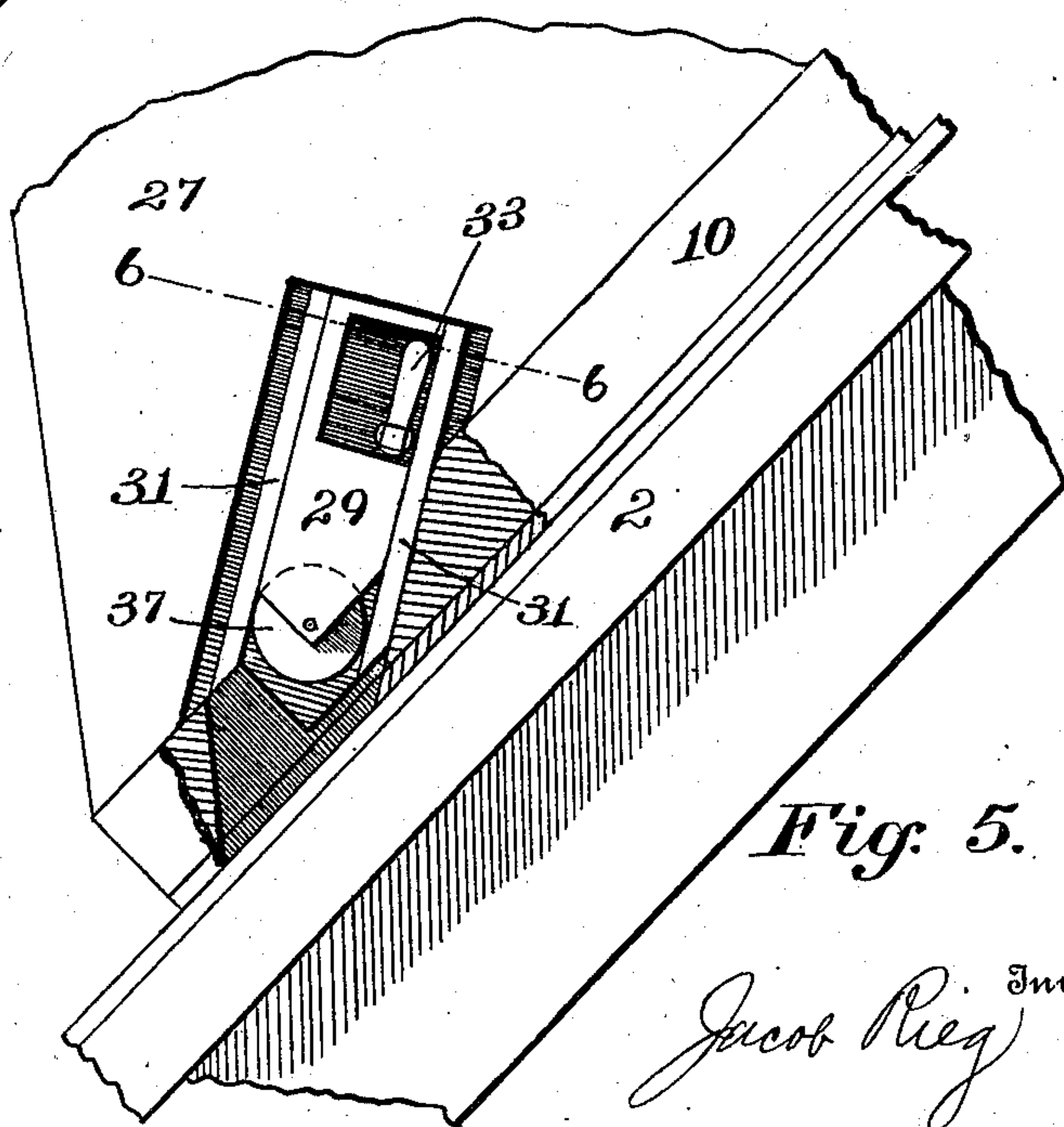
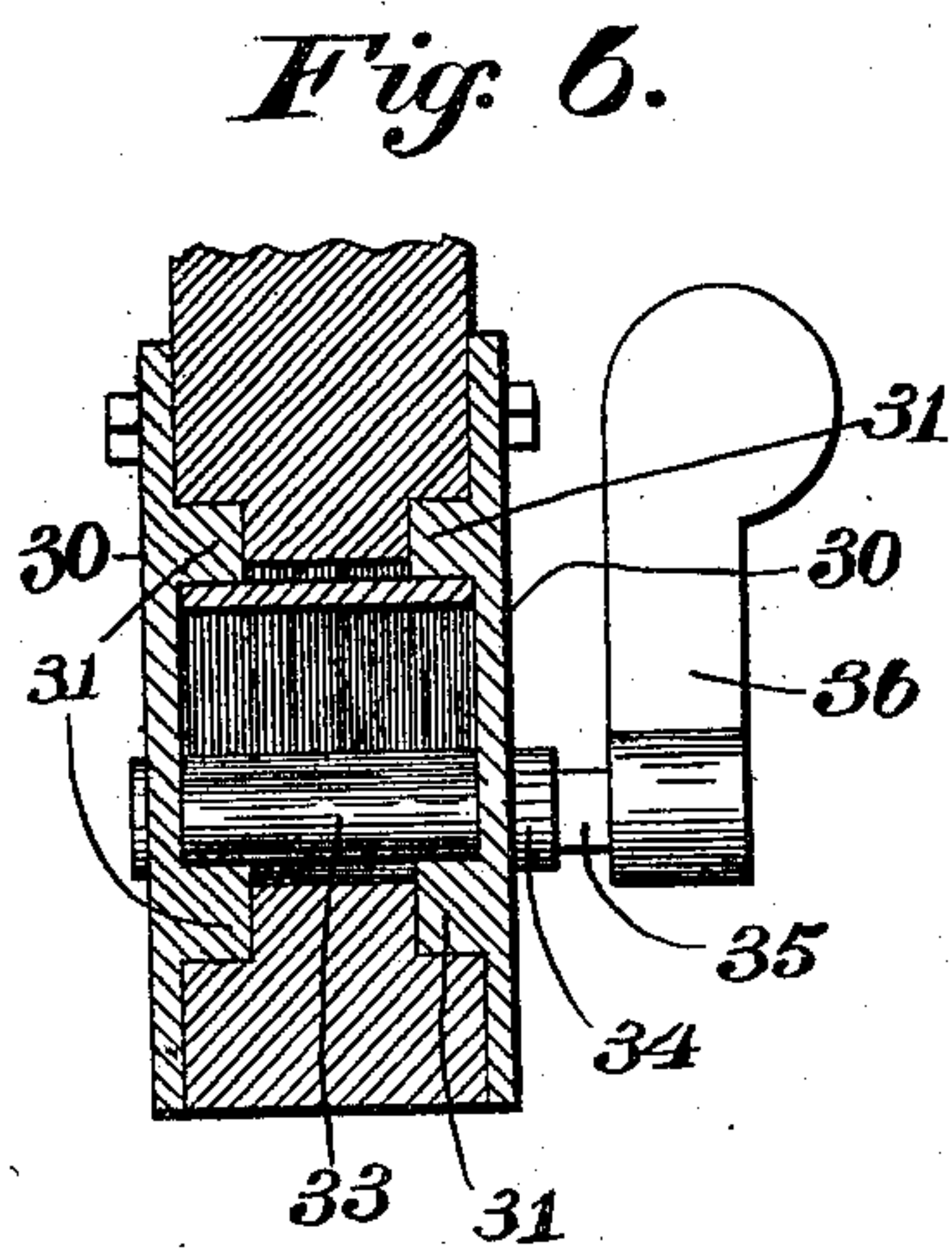
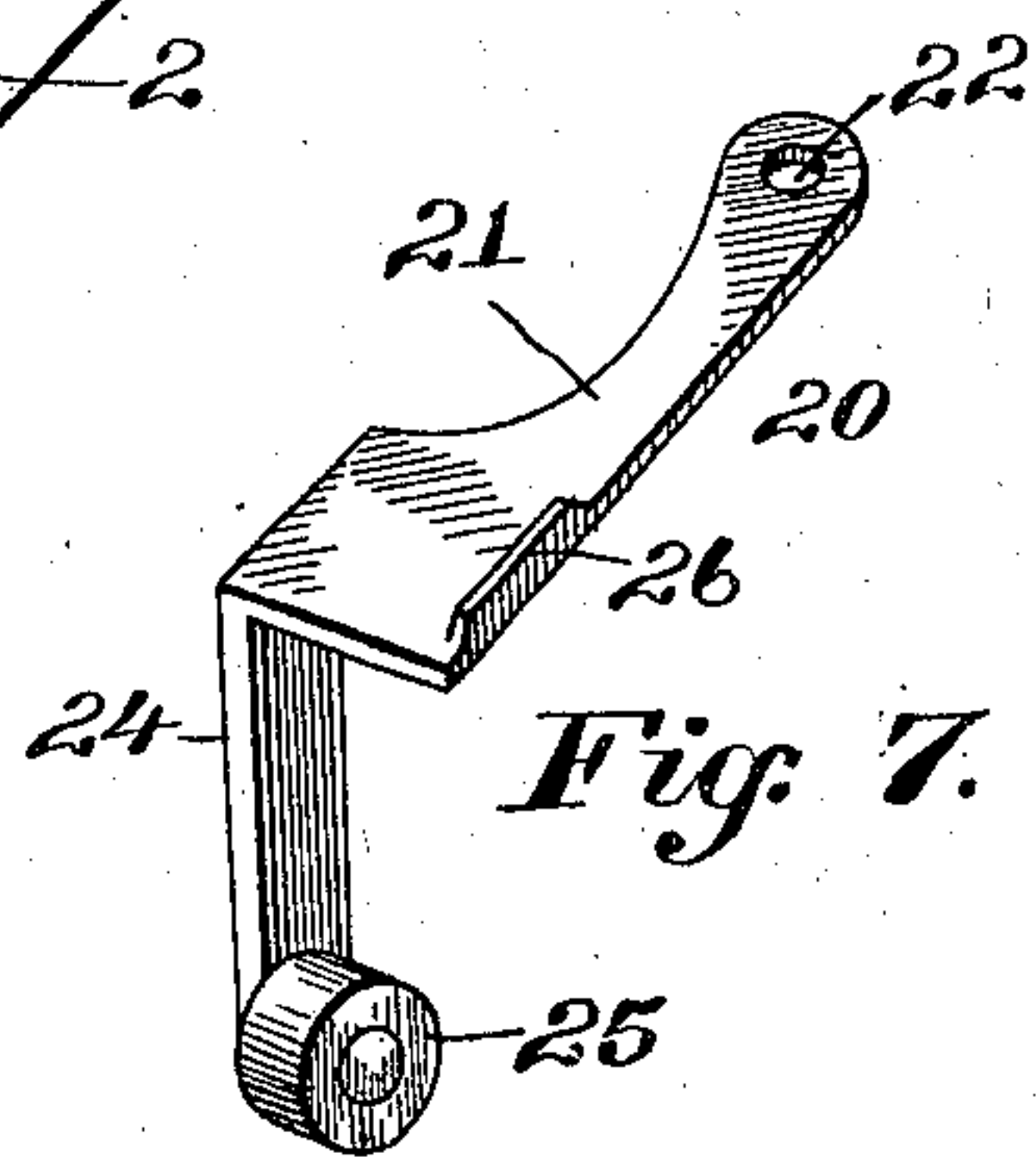
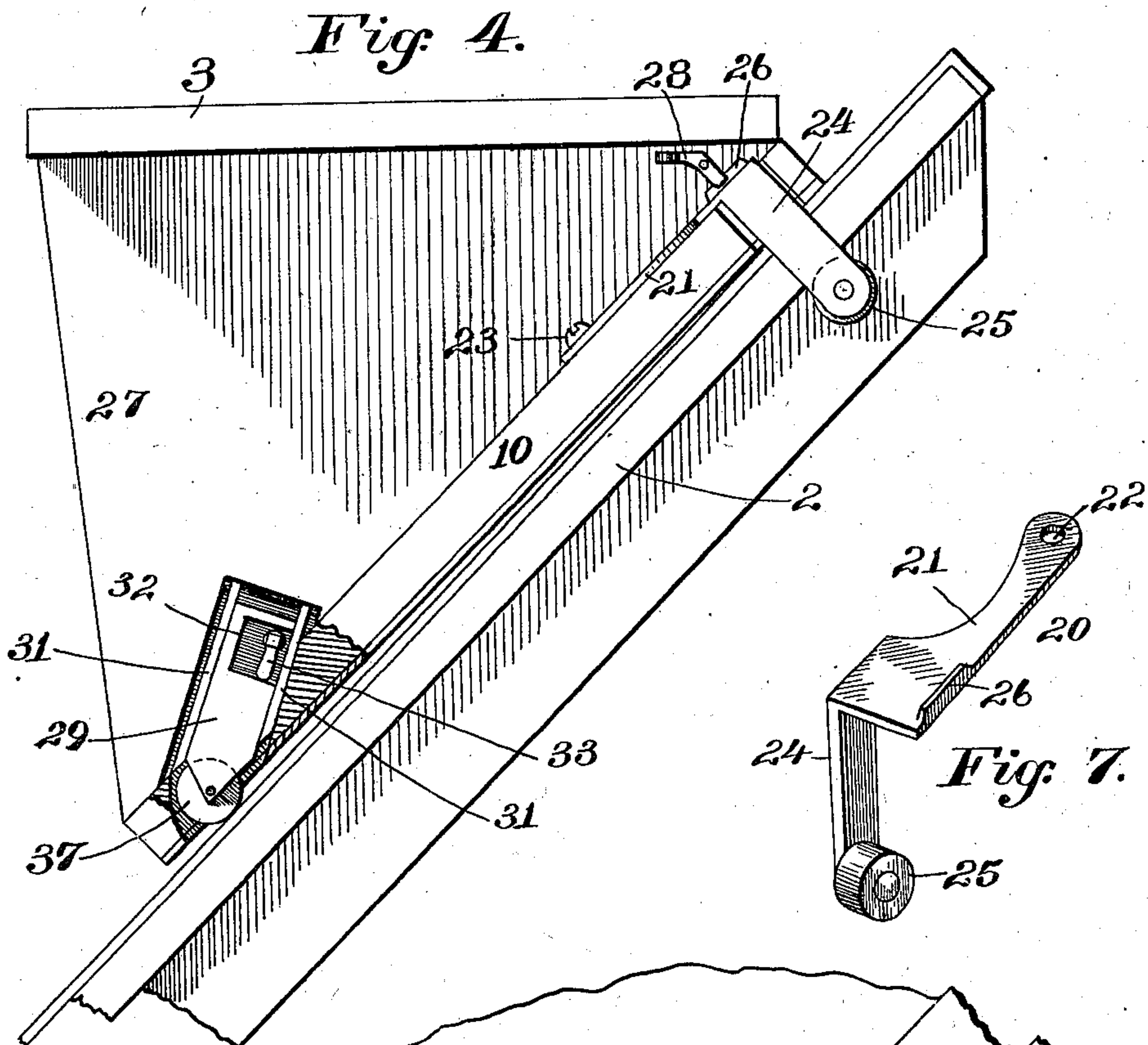
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2 SHEETS—SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JACOB RIEG, OF WILKESBARRE, PENNSYLVANIA.

SIDEWALK-ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 724,205, dated March 31, 1903.

Application filed August 26, 1902. Serial No. 121,084. (No model.)

To all whom it may concern:

Be it known that I, JACOB RIEG, a citizen of the United States, residing at Wilkesbarre, in the county of Luzerne, State of Pennsylvania, have invented certain new and useful Improvements in Sidewalk-Elevators, of which the following is a specification.

This invention comprises certain improvements in sidewalk-elevators of the kind illustrated in my Patent No. 663,786.

The details of the present improvements will be pointed out in the following specification, taken in connection with the accompanying drawings, in which—

Figure 1 is a front view of the elevator, the upper portions of the guideways only being shown. Fig. 2 is a side view of the same. Fig. 3 is a rear view of the same. Fig. 4 is an enlarged side view showing the platform and upper portion of the ways, the side of the platform being partly broken away and one of the guide-plates for the bolt carrying the roller-bearing being removed. Fig. 5 is a similar view showing the lower part of the platform with the roller-bearing removed from contact with the guideway. Fig. 6 is a section on the line 6 6 of Fig. 5, both guide-plates being shown in position. Fig. 7 is a perspective view of one of the flanged guide-pieces for guiding the platform.

Referring to the drawings, 1 and 2 indicate a pair of parallel guideways which may be suitably connected together and upon which is arranged a platform 3. A rope 4 is provided for the purpose of raising and lowering the platform. One end of this rope is detachably connected to the platform by means of a suitable hook 6, and the opposite end of the rope is secured to a pulley-frame 7, suitably supported between the guideways. The rope extends from the stationary pulley-frame 7 around a series of friction-rollers 8, arranged in a zigzag manner in a pulley-frame 9 upon the back 10 of the platform, and from thence passes around a series of pulleys 11 in the stationary pulley-frame 7, thence through an eye 12 upon a lever 13, and its free end is connected by the hook 6 to the platform. The purpose of the friction-pulleys is to enable the operator to lower heavy loads easily. These pulleys, however, add friction to the movement of the slide in both directions, and

hence considerable power is necessary to raise the platform by pulling on the part 4^b of the rope, especially if the platform carries a load. In order to raise the platform readily, the part 4^a of the rope is connected directly, by means of the hook 6, to the platform, so that by pulling upon the part 4^a of the rope the platform may be raised with a minimum amount of friction, and the slack in the part 4^b of the rope may be taken up after the platform is raised.

In order to lock and hold the platform in its raised position, a lug 14 is arranged upon the back of the platform, which lug is engaged by a catch 16 upon the lower end of the lever 13 by simply moving the part 4^b of the rope to the left (in Fig. 3) after the platform is in its highest position. This arrangement for supporting the platform in its highest position is shown in my patent already referred to. In the present invention I have arranged a spring-latch 17 on the pulley-frame 7, which when the lever 13 is moved to engage the lug hooks under a catch 18 at the upper end of the lever and holds the lever with the catch 16 in engagement with the lug upon the platform.

Guide-rollers 19 are arranged upon the platform adjacent to the inner sides of the guideways and serve to guide the lower end of the platform. The upper portion of the platform is guided by means of guide-pieces 20, (shown in detail in Fig. 7,) each guide-piece comprising a part 21, having at one end an opening 22, through which a pivot-pin 23 extends into the face of the back piece 10 of the platform. A flange 24 extends downwardly from the forward end of the part 21 and at the lower end of said flange is arranged a roller 25, which extends beneath the guideway. At the inner side of the part 21 is arranged an upwardly-projecting rib 26. These flanged guide-pieces are pivoted in the manner shown near the opposite sides of the back piece 10, and when in their normal positions the inner edges of said guide-pieces rest against the brackets 27 of the platform. The guide-pieces are locked in their normal positions by means of catches or buttons 28, pivotally secured to the brackets and adapted to extend in front of the ribs 26. When it is desired to remove the platform from the skids or guideways, it is merely

necessary to disengage the catches 28 from the ribs 26, and the flanged guide-pieces may be then swung outwardly, as shown in dotted lines in Fig. 1, until the rollers 25 are moved 5 from beneath the guideways.

It is desirable at times to lessen the friction of the platform upon the guideways—as, for instance, where the elevator is not steeply inclined or where the loads are light and the 10 friction is not desirable for the purpose of retarding the descent of the load and also in cases where the material is being raised instead of being lowered. For this purpose I have arranged within a recess in each bracket 15 of the platform a bolt 29, movable between guide-plates 30, which latter are secured to the brackets and inclose the recess laterally. The guide-plates are provided with parallel ribs 31, arranged at an acute angle to the 20 back of the platform, these ribs serving as guides for the bolts 29. A rectangular recess 32 is formed in the rear end of the bolt, and within said recess is a cam or key 33 upon a shaft 34, pivotally mounted in the plates 30 25 and having a squared end 35, to which may be attached a wrench 36. The lower end of the bolt 29 is forked, and between the forked ends of the bolt is pivoted a roller 37. By turning the wrench 36 in one direction the 30 bolt carrying the roller will be moved into its retracted position, (shown in Fig. 5,) in which position the bolt is locked against accidental displacement by the key 33. When the key 33 is given a semirevolution, however, the 35 bolt is forced downwardly and the roller 37 rests against the adjacent guideway, in which position it is locked by the key 33, as shown in Fig. 4. The platform is thus raised out of engagement with the guideways, except at its 40 upper end, as plainly illustrated in Fig. 4. The rollers thus form bearings for the platform and lessen the friction of the platform upon the guideways.

Having thus described my invention, what 45 I claim as new, and desire to secure by Letters Patent, is—

1. In a sidewalk-elevator, the combination with a pair of parallel guideways, of a platform adapted to slide on said guideways, and 50 rollers upon said platform movable out of and into engagement with the guideways and

adapted to form bearings for the platform when in engagement with the guideways.

2. In a sidewalk-elevator, the combination with a pair of parallel guideways, of a platform adapted to slide on said guideways, rollers upon said platform movable out of and into engagement with the guideways and adapted to form bearings for the platform when in engagement with the guideways, and 60 means for locking said rollers in different positions.

3. In a sidewalk-elevator the combination with a pair of parallel guideways, of a platform adapted to slide on said guideways, rollers upon said platform movable out of and into engagement with the guideways and adapted to form bearings for the platform when in engagement with the guideways, bolts to which said rollers are pivoted and keys arranged to move and lock said bolts in two 70 positions.

4. In a sidewalk-elevator the combination with a pair of parallel guideways, of a platform movable thereon and flanged guide-pieces hinged to said platform and having parts normally extending beneath the guideways, said guide-pieces being laterally movable with respect to the guideways. 75

5. In a sidewalk-elevator the combination 80 with a pair of parallel guideways, of a platform movable thereon, flanged guide-pieces hinged to said platform and having parts normally extending beneath guideways, said guide-pieces being movable laterally with respect to the guideways and latches for locking 85 said guide-pieces in their normal positions.

6. In a sidewalk-elevator, the combination with a pair of parallel guideways and a platform movable thereon, of a series of friction-pulleys arranged at the upper end of said 90 guideways, a series of friction-pulleys secured to the platform and a rope extending around both series of pulleys, said rope having one end attached to a fixed part of the elevator 95 and its opposite end attached to the platform.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB RIEG.

Witnesses:

W. L. RAEDER,
W. C. OLDS.